

AMENDMENTS TO THE CLAIMS:

1. (Currently amended) A scintillator comprising:
a Group III nitride compound semiconductor,
wherein said scintillator is excited by radiation.
2. (Currently amended) A scintillator according to claim 1, wherein said Group III nitride compound semiconductor includes has a layer structure.
3. (Original) A scintillator according to claim 2, wherein a layer of said Group III nitride compound semiconductor is formed on a substrate.
4. (Original) A scintillator according to claim 3, wherein a buffer layer is formed between said substrate and said Group III nitride compound semiconductor layer.
5. (Currently amended) A scintillator according to claim 2, wherein said Group III nitride compound semiconductor layer includes has a hetero structure.
6. (Original) A scintillation counter including a scintillator according to claim 1.
7. (Original) A scintillation counter including a scintillator according to claim 2.
8. (Original) A scintillation counter including a scintillator according to claim 3.

9. (Original) A scintillation counter including a scintillator according to claim 4.
10. (Original) A scintillation counter including a scintillator according to claim 5.
11. (New) A scintillator according to claim 1, wherein said Group III nitride compound semiconductor comprises:
a layer that emits fluorescent light when radiated by at least one of a CU-K α -ray source, an X-ray source, and a γ -ray source.
12. (New) A scintillator according to claim 1, wherein said Group III nitride compound semiconductor comprises:
a layered structure including a plurality of alternating GaN layers and InGaN layers.
13. (New) A scintillation counter according to claim 6, wherein said scintillator counter comprises:
a radiation source that irradiates at least a portion of said scintillator; and
a light receiving unit that receives light emitted from said scintillator.
14. (New) A scintillation counter according to claim 13, wherein said radiation source includes at least one of a CU-K α -ray source, an X-ray source, and a γ -ray source.
15. (New) A scintillation counter according to claim 13, wherein said light receiving unit comprises:

a light amplifying and detecting unit.

16. (New) A scintillation counter according to claim 13, wherein said light receiving unit comprises:

a photomultiplier tube.

17. (New) A scintillation counter according to claim 13, further comprising:
a spectrascope disposed between said scintillator and said light receiving unit,
wherein said spectrascope prevents light of a predetermined wavelength
from reaching the light receiving unit.